# HANDBOOK OF PHONOLOGICAL DATA
# FROM A SAMPLE OF THE WORLD'S LANGUAGES

A Report of the Stanford Phonology Archive

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| | 335 Chuvash | 335 Chuvash | 335 Chuvash |
|---|---|---|---|
| 335 | 01 p<br>[b-half-voice][60] | (loan)<br>13 s-hacek[02] | |
| 335 | 02 b[30]<br>(loan) | 14 c-fricative[03] | 51 i<br>[i-backed][63] |
| 335 | 03 t<br>[d-half-voice][60] | 15 z-hacek[02 30]<br>(loan) | 52 u-trema |
| 335 | 04 t-palatalized[01] | 16 x | 53 e-mid[04] |
| 335 | 05 d[30]<br>(loan) | 17 m | 54 o-mid-trema-over-short[05 06] |
| 335 | 06 k<br>[g-half-voice][60]<br>[k-palatalized][61] | 18 m-long<br>19 n<br>[eng][62] | 55 u<br>56 i-trema[31] |
| 335 | 07 g[30]<br>(loan) | 20 n-palatalized[01] | 57 o-mid[32]<br>(loan) |
| 335 | 08 t/s[30]<br>(loan) | 21 n-long<br>22 l | 58 o-open-over-short[05]<br>[schwa-over-short][64] |
| 335 | 09 t/s-hacek[02] | 23 l-palatalized[01] | 59 alpha-unrounded |
| 335 | 10 f[30]<br>(loan) | 24 l-long<br>25 r | 60 yod<br>61 yod-long |
| 335 | 11 s | 26 r-long | 62 w[07] |
| 335 | 12 z[30] | | 63 w-long |

335 $a Chuvash $b Lower $d Turkic $e W USSR (Chuvash SSR) $f 1.5 million $g Merritt Ruhlen $g Marilyn Vihman (review) $g John Crothers (editor)

335 $a Andreev, I. A. $b 1966 $c Chuvashskij jazyk $d Jazyki narodov SSSR vol. 2, pp.43-65 $g Moscow: Nauka $s Very minimal phonetic information.

335 $a Krueger, John R. $b 1961 $c Chuvash Manual $f (Uralic and Altaic Series, 7) $g Bloomington: Indiana University $q textual sources $s This source is more explicit than Andreev 1966 with regard to phonetic and phonemic information, but because the author has not had the opportunity to hear the language spoken, the phonetics remain open on many points.

335 $a **LONG CONSONANTS** $A Andreev 1966 explicitly notes that "in intervocalic position the sonorants are further opposed by length," and offers examples of phonemically distinct long and short /w/, /l/, /n/, and /r/. (p.45) He notes also that "in intervocalic position, and also after sonorant followed by a vowel, the obstruents may occur in a voiceless variant, which in writing is expressed by a doubling of the letter in question, or they may undergo partial voicing." (p.45f) Krueger 1961 makes a distinction between the "prerevolutionary Chuvash phonemic system" and the system existing later, after "Russian words with voiced consonants began to be introduced in large numbers, this being aided by the presence of voiced allophones already in the language (the voiced consonants in older Russian loanwords were converted to their unvoiced equivalents for the most part). At the same time, the feature of length after [the sonorants] began to be neutralized." (p.69) Krueger cites Yegorov (Chuvash-Russian Dictionary, 1954) to the effect that the doubling of letters denoting obstruents "in our time is no longer a sign of length, but a mere orthographical device to denote voiceless consonants in a voiced position." Krueger comments that "there are some cases of free variation [judging from the orthography]...between voiced and voiceless [following sonorants]." (Ibid.) In the Archive coding we distinguish long and short sonorants but not obstruents; on the other hand, following Krueger, we establish tense stops with intervocalic half-voiced allophones, and include fully voiced obstruents only with the status "loan." [MV]

335 $a **PALATALIZED CONSONANTS** $A According to Andreev 1966, all the consonants are slightly palatalized next to front vowels, but /t/, /n/, and /l/ contrast with a palatalized series /t-palatalized/, /n-palatalized/, and /l-palatalized/. (p.46) All of Andreev's examples show the contrast in word-final position, where we may speculate that loss of a reduced front vowel (a common process in that position according to Andreev) has produced the opposition. Krueger

denies the existence of a phonemic contrast between /l/ and /l-palatalized/ ("no minimal pairs have been found as yet" (p.78)); he specifies palatalization of /l/ and /n/ before /t/s-hacek/ and before front vowels; for /t/, he mentions "a palatalized allophone...but the phonological conditions under which it occurs are not as yet clearly defined." (p.82) From his one example of /t-palatalized/, as well as his comment that /l-palatalized/ "is also found with back [vowels]" (p.78), I conclude that the palatalized alveolars may be morphophonemically predictable, but they contrast on the surface. In the absence of further information, we code them as independent phonemes here. [MV]

335 $a **STRESS** $A In the absence of reduced vowels stress almost always falls on the final syllable.... In words with reduced vowels stress falls on the last full vowel.... If all the vowels in a word are reduced, stress falls on the first syllable. Russian loanwords preserve the Russian stress in the base form, but in all other forms they follow the Chuvash stress patterns." (p.46) "Stress...is not the strong emphasis found in English words, but simply a slightly increased intensity of sound, perhaps accompanied with a slight shift of pitch. The stress on all syllables is approximately the same...." (Krueger 1961, p.84)

335 $a **SYLLABLE** $A (C)V(C)(C)

335 $a **VOWEL HARMONY** $A "A characteristic feature of the Chuvash literary language is the rule of Palatal Vowel Harmony (Upper Chuvash also has a rule of Labial Vowel Harmony). Vowel Harmony also affects the vowels of affixes--both derivational and inflectional--so that affixes usually have two variants--one hard and one soft.... In the contemporary language violations of Palatal Vowel Harmony are rather numerous." For example some front vowel affixes lack a back vowel variant; many loan words constitute exceptions. (p.46)

335 01 $A All consonants are slightly palatalized next to front vowels; only /t/, /n/, and /l/ show a phonemic opposition to their palatalized counterparts. (p.46-47) See note on palatalized consonants.

335 02 $A Point of articulation of /t/s-hacek, s-hacek, z-hacek/ is unclear.

335 03 $A It is not clear what the exact phonetic nature of /c-fricative/ is. It is represented by the symbol for [c-fricative], but may be a palatalized [s]. (Cf. p.45)

335 04 $A /e-mid/ is "open or close depending on its position in the word." (p.44)

335 05 $A "The characteristic feature of this sound is its shortness." (p.44) "An important characteristic of the Chuvash vowel system is the instability of the reduced vowels /o-mid-trema-over-short/ and /o-open-over-short/. In weak, unstressed position they almost disappear." (p.47) They are stressed only when they occur in the first syllable of words containing only over-short vowels.

335 06 $A /o-mid-trema-over-short/ varies between reduced [i], [e], and [o-trema]. (Krueger, p.72)

335 07 $A /w/ is orthographically "v;" precise articulation not known.

335 30 $A /b, d, g, t/s, f, z, z-hacek/ occur "only in Russian loanwords." (p.46)

335 31 $A "Unlike the other vowels /i-trema/ never occurs word-finally." (p.45)

335 32 $A /o-mid/ "occurs only in Russian loanwords." (p.46)

335 60 $A Stops are partially voiced intervocalically. (Andreev, p.46; Krueger, p.75) Degree of voicing unclear from descriptions. See Krueger (p.69) on possible phonemic contrast of voiced and voiceless stops, due to shortening of (voiceless) geminates.

335 61 $A /k/ is "somewhat palatalized before front vowels." (Krueger, p.77)

335 62 $A /n/ is realized as [eng] before velars.

335 63 $A /i/ is backed "after /s/, and also as an affix after /l/, /n/, /t/." (p.44)

335 64 $A /o-open-over-short/ is realized as [schwa-over-short] in unstressed syllables, when the stressed vowel is not /o-open/. (Krueger, p.71)